

3.21 Threatened and Endangered Species

The analysis of impacts of the MCP project on threatened and endangered species is based on the *Natural Environment Study* (NES) (July 2008), the *Supplement to the Natural Environment Study* (December 2011), the Mid County Parkway Multiple Species Habitat Conservation Plan (MSHCP) Consistency Determination Including Determination of Biologically Equivalent or Superior Preservation Analysis (September 2014), and the Determination of Biologically Equivalent or Superior Preservation Analysis Addendum (October 2014) provided in Appendix T of this Final EIR/EIS.

3.21.1 Regulatory Setting

The primary federal law protecting threatened and endangered species is the Federal Endangered Species Act (FESA): 16 United States Code (USC), Section 1531, et seq. See also 50 Code of Federal Regulations (CFR) Part 402. This act and later amendments provide for the conservation of endangered and threatened species and the ecosystems upon which they depend. Under Section 7 of this act, federal agencies, such as the Federal Highway Administration (FHWA), are required to consult with the U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries Service) when a federal action (e.g. funding, permitting or authorizing actions) may affect listed species or adversely modify designated critical habitat. Critical habitat is defined as geographic locations critical to the existence of a threatened or endangered species. Formal consultation is required when a federal action may adversely affect a federally listed species. The outcome of formal Section 7 consultation with the USFWS and/or NOAA is a Biological Opinion that documents whether or not the USFWS/NOAA agrees with the agency determination of effect for a proposed action.

California has enacted a similar law at the state level, the California Endangered Species Act (CESA), California Fish and Game Code, Section 2050, et seq. CESA emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate planning to offset project-caused losses of listed species populations and their essential habitats. The California Department of Fish and Wildlife (CDFW) is the agency responsible for implementing CESA. Section 2081 of the Fish and Game Code prohibits "take" of any species determined to be an endangered species or a threatened species. Take is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA allows for take incidental to otherwise lawful

development projects; for these actions an incidental take permit is issued by CDFW. For species listed under both FESA and CESA requiring a Biological Opinion under Section 7 of the FESA, CDFW may also authorize impacts to CESA species by issuing a Consistency Determination under Section 2080.1 of the Fish and Game Code.

Another federal law, the Magnuson-Stevens Fishery Conservation and Management Act of 1976, was established to conserve and manage fishery resources found off the coast, as well as anadromous species and continental shelf fishery resources of the United States, by exercising (a) sovereign rights for the purposes of exploring, exploiting, conserving, and managing all fish within the exclusive economic zone established by Presidential Proclamation 5030, dated March 10, 1983, and (b) exclusive fishery management authority beyond the exclusive economic zone over such anadromous species, continental shelf fishery resources, and fishery resources in special areas. The project site is approximately 70 miles from the Pacific Ocean, and no anadromous species or continental shelf fishery resources would be affected by the project. As a result, those types of resources are not analyzed or discussed further in this section.

3.21.2 Affected Environment

As part of the literature search discussed in the NES, the USFWS provided a list of threatened, endangered, or candidate plant and wildlife species that may be present in the project area. That letter, dated June 30, 2011, is provided in Appendix L, USFWS Letter-Species List. Additionally, MCP project representatives met with Karin Cleary-Rose (USFWS) on February 22, 2011, to verify that there were no outstanding questions relative to use of the 2005-2007 species survey data.

The 25 threatened or endangered species listed in Table 3.21.A may occur in the project area and were identified through the literature review. As shown in Table 3.21.A, there are no candidate species in the biological study area (BSA). As a result, the analysis in this section focuses on listed species.

Focused protocol surveys were conducted in suitable habitat within the BSA for 11 of the threatened and endangered species listed in Table 3.21.A as required under the Western Riverside County MSHCP and as described earlier in Section 3.17, Natural Communities.

Table 3.21.A Threatened and Endangered Species that May Occur in the Project Area

| Common Name | Scientific Name | Federal/State Status | Critical Habitat in BSA? | MSHCP Survey Conducted? | Presence/Absence in BSA |
|--------------------------------|------------------------------------|------------------------|--------------------------|-------------------------|--|
| Munz's onion | Allium munzii | Endangered/ Threatened | No | Yes | Absent: Not observed during focused surveys. |
| San Diego ambrosia | Ambrosia pumula | Endangered/none | No | Yes | Absent: Not observed during focused surveys. |
| Braunton's milk-vetch | Astragalus brauntonii | Endangered/none | No | No | Absent: BSA is outside known range, no habitat present. |
| San Jacinto Valley crowscale | Atriplex coronata var. notatior | Endangered/none | No ¹ | Yes | Present. |
| Nevin's barberry | Berberis nevinii | Endangered/Endangered | Yes | No | Absent. Not known from or expected in project vicinity. |
| Thread-leaved brodiaea | (Brodiaea filifolia | Threatened/Endangered | No | Yes | Absent: Not observed during focused surveys. |
| Slender-horned spineflower | Dodecahema leptoceras | Endangered/Endangered | No | No | Absent: No habitat present. |
| San Diego button-celery | Eryngium aristulatum var. parishii | Endangered/ Endangered | No | No | Absent: BSA is outside expected range. |
| Spreading navarretia | Navarretia fossalis | Threatened/none | No | Yes | Present. |
| California Orcutt grass | Orcuttia californica | Endangered/Endangered | No | Yes | Absent: Not observed during focused surveys. |
| Vernal pool fairy shrimp | Branchinecta lynchi | Threatened/none | No | Yes | Absent: Not observed during focused surveys. |
| Riverside fairy shrimp | Streptocophalus woottoni | Endangered/none | No | Yes | Absent: Not observed during focused surveys. |
| Quino checkerspot butterfly | Euphydryas editha quino | Endangered/none | No | No | Absent: BSA is outside range of species. |
| Arroyo toad | Bufo californicus | Endangered/none | No | No | Absent: BSA is outside of current range of species. |
| California red-legged frog | Rana aurora draytonii | Threatened/none | No | No | Absent: No habitat present. |
| Swainson's hawk | Buteo swainsoni | None/Threatened | No | No | Potentially present as foraging individuals. |
| Western yellow-billed cuckoo | Coccyzus americanus occidentalis | None/Endangered | No | No | Absent: BSA is outside nesting range. |
| Southwestern willow flycatcher | Empidonax traillii extimus | Endangered/Endangered | No | Yes | Potentially present as migrating individuals. |

Table 3.21.A Threatened and Endangered Species that May Occur in the Project Area

| Common Name | Scientific Name | Federal/State Status | Critical Habitat in BSA? | MSHCP Survey Conducted? | Presence/Absence in BSA |
|--------------------------------|------------------------------------|-----------------------------------|--------------------------|-------------------------|--|
| American peregrine falcon | Falco peregrinus anatum | None/Endangered | No | No | Absent. No nesting habitat. |
| Bald eagle | Haliaeetus leucocephalus | Delisted ² /Endangered | No | No | Absent. No nesting habitat. Low likelihood of foraging individuals. |
| Coastal California gnatcatcher | Polioptila californica californica | Threatened/none | No | No | Potentially present. |
| Bank swallow | Riparia riparia riparia | None/Threatened | No | No | Absent: BSA is outside nesting range. |
| Least Bell's vireo | Vireo belli pusillus | Endangered/Endangered | No | Yes | Present. |
| San Bernardino kangaroo rat | Dipodomys merriami parvus | Endangered/none | Yes | Yes | Present. |
| Stephens' kangaroo rat | Dipodomys stephensi | Endangered/Threatened | No | No | Potentially present. |

Source: LSA Associates, Inc. (2012) and USFWS (2012).

Note: Brand's phacelia was identified as a candidate species in the USFWS species list dated June 21, 2011. As discussed in Appendix N, the MCP project is not within the geographic range of this species, which is restricted to sandy benches along the Santa Ana River that are well outside the BSA for the MCP project. As a result, Brand's phacelia is not discussed in this table.

¹ USFWS proposed critical habitat for the San Jacinto Valley crownscale on April 16, 2012, subsequent to the approval of the *Supplemental to the Natural Environment Study* (2011). On April 16, 2013, the USFWS did not designate any critical habitat for the San Jacinto Valley crownscale, after circulation of the Recirculated Draft EIR/Supplemental Draft EIS.

² The bald eagle was federally delisted as of August 8, 2007 and for five years after that date was subject to monitoring per the federal Endangered Species Act. The bald eagle is protected under the Migratory Bird Treaty Act and the Bald and Golden Eagle Act as discussed earlier in Section 3.18, Animal Species. It is also a fully protected species under California law.

BSA = biological study area

MSHCP = Multiple Species Habitat Conservation Plan

USFWS = United States Fish and Wildlife Service

Surveys were not conducted for other threatened or endangered species because no suitable habitat exists for these species within the MSHCP-designated survey areas, and incidental take is authorized for these species outside the designated survey areas (refer to Section 3.17, Natural Communities, for additional discussion). Within the MSHCP survey areas, where target species are determined to be present, areas having long-term conservation value for those species must be in compliance with MSHCP provisions (avoidance or mitigation until conservation goals for species are met).

Of the 25 threatened and endangered species that may occur in the project area, 17 species were determined to be absent from the project BSA based on species distribution, the lack of suitable habitat in the area, or the results of focused surveys as described in Table 3.21.A. The eight remaining threatened and endangered species were found within the BSA during the focused surveys or have potentially suitable habitat present in the BSA, and critical habitat is designated or proposed for three of these species within the BSA as shown in Table 3.21.A. These eight species (San Jacinto Valley crowscale, spreading navarretia, southwestern willow flycatcher, bald eagle, coastal California gnatcatcher, least Bell's vireo, San Bernardino kangaroo rat, and Stephens' kangaroo rat) are discussed below, as well as a further discussion of arroyo toad and Swainson's hawk.

3.21.3 Environmental Consequences

3.21.3.1 Permanent Impacts

Build Alternatives

Impacts to threatened and endangered species are based on surveys conducted within designated survey areas for designated species, per MSHCP requirements. Additional areas that support listed species may occur outside designated survey areas and within the project footprint; however, impacts to areas outside these survey areas were considered when preparing the MSHCP and are mitigated by RCTC's participation as a Permittee under the MSHCP.

Take of Covered Species Adequately Conserved under the provisions of the Western Riverside County MSHCP is authorized by the Natural Communities Conservation Plan (NCCP) Permit issued by the California Department of Fish and Wildlife (CDFW) and by the Section 10(a)(1)(B) permit by the USFWS in June 2004, based on the approval of the Western Riverside County MSHCP. The MCP project is consistent with the Western Riverside County MSHCP, as determined by the Resource Conservation Agency (RCA) with concurrence from the USFWS and CDFW as documented in correspondence provided in Appendix T, Western Riverside

County Multiple Species Habitat Conservation Plan Consistency Determination. The Western Riverside County MSHCP is also a NCCP as discussed earlier in Section 3.17.1.1. No additional take authorization is required by the CDFW for impacts to state listed species. Section 7 consultation requirements under FESA are addressed for each species separately in the following subsections.

The project “may affect, likely to adversely affect” San Jacinto Valley crownscale, spreading navarretia, California gnatcatcher, least Bell’s vireo, San Bernardino kangaroo rat, and Stephens’ kangaroo rat. Table 3.21.B summarizes impacts to threatened and endangered species, based on impacts to areas of designated and proposed critical habitat, areas known to consist of suitable habitat for other listed species (such as coastal California gnatcatcher), and areas within the MCP project right of way determined to have long-term conservation value for MSHCP survey species.

Figure 3.21.1 shows the relationship of the composite project footprint for all of the MCP Build Alternatives with respect to critical habitat areas and known locations of listed species. Direct effects to these threatened and endangered species and critical habitats are discussed by individual species below, followed by a discussion of indirect effects to all of the species at the end of this section.

San Jacinto Valley Crownscale

In areas where San Jacinto Valley crownscale was found to be present during focused surveys, the occupied areas were assessed for long-term conservation value within the designated survey area within the MCP project footprint. Impact estimates are based on a conservative (worst-case) assumption that all of the San Jacinto Valley crownscale habitat in the right-of-way footprint will be permanently impacted. Further, all (100 percent) of these areas to be impacted are considered to have long-term conservation value.

All of the MCP Build Alternatives would directly impact 0.36 acre of San Jacinto Valley crownscale within the MSHCP-designated survey area for this species. Because greater than 10 percent of areas within the right-of-way footprint that have long-term conservation value for this species will be impacted, a Determination of Biological Equivalent or Superior Preservation (DBESP) was prepared pursuant to MSHCP, Section 6.1.3. The DBESP requirements are discussed below in Section 3.21.4. Refer to Appendix T, Western Riverside County Multiple Species Habitat Conservation Plan Consistency Determination, which includes the Regional

Table 3.21.B Impacts to Threatened and Endangered Species

| Alternative/ Design Variation | Total Impacts ¹ in Acres | | | | | | | | |
|--|-------------------------------------|---|--|--|--|--|--|---|--|
| | Spreading Navarretia | Spreading Navarretia, Final Critical Habitat (10/7/2010) Total | Spreading Navarretia, Final Critical Habitat (10/7/2010) with Primary Constituent Elements | <u>San Jacinto Valley Crownscale</u> | Coastal California Gnatcatcher (Riversidean Upland Sage Scrub) ² | Stephens' Kangaroo Rat (Riversidean Upland Sage Scrub and Grassland Communities ³ | San Bernardino Kangaroo Rat, Final Reinstated Critical Habitat (4/23/2002) ⁴ | San Bernardino Kangaroo Rat Habitat (Occupied Habitat) | Least Bell's Vireo (Occupied Riparian Habitat) |
| Alt 4 Mod | 1.09 | 16.5 | 1.09 | <u>0.36</u> | 93.6 | 142.2 | 2.9 | 4.25 | 3.66 |
| Alt 4 Mod SJN DV | 1.09 | 16.5 | 1.09 | <u>0.36</u> | 93.6 | 142.2 | 2.9 | 4.32 | 3.59 |
| Alt 4 Mod SJRB DV | 1.09 | 18.6 | 1.09 | <u>0.36</u> | 93.6 | 142.2 | 2.9 | 4.25 | 3.66 |
| Alt 5 Mod | 1.09 | 16.5 | 1.09 | <u>0.36</u> | 90.5 | 138.4 | 2.9 | 4.25 | 3.66 |
| Alt 5 Mod SJN DV | 1.09 | 16.5 | 1.09 | <u>0.36</u> | 90.5 | 138.4 | 2.9 | 4.32 | 3.59 |
| Alt 5 Mod SJRB DV | 1.09 | 18.6 | 1.09 | <u>0.36</u> | 90.5 | 138.4 | 2.9 | 4.25 | 3.66 |
| Alt 9 Mod | 1.09 | 16.5 | 1.09 | <u>0.36</u> | 88.1 | 145.6 | 2.9 | 4.25 | 3.66 |
| Alt 9 Mod SJN DV | 1.09 | 16.5 | 1.09 | <u>0.36</u> | 88.1 | 145.5 | 2.9 | 4.32 | 3.59 |
| Alt 9 Mod SJRB DV | 1.09 | 18.6 | 1.09 | <u>0.36</u> | 88.1 | 145.6 | 2.9 | 4.25 | 3.66 |
| <u>Preferred Alternative (Alt 9 Mod SJRB DV)</u> | <u>1.09</u> | <u>18.6</u> | <u>1.09</u> | <u>0.36</u> | <u>86.4</u> | <u>194.3</u> | <u>1.5</u> | <u>1.29</u> | <u>3.6</u> |

Source: *Supplement to the Natural Environment Study* (December 2011) and Appendix T, *Western Riverside County Multiple Species Habitat Conservation Plan Consistency Determination*, which includes the Regional Conservation Authority Joint Project Review for the MCP project.

¹ Impacts to listed species are all calculated as permanent within the right-of-way boundary for each alternative. This total amount identified in the table is a worst-case scenario and includes all permanent impacts as well as temporary impacts. Actual permanent impacts of the MCP Build Alternatives would be less than identified in this table.

² Impacts to coastal California gnatcatcher habitat identified in this table include all potentially suitable habitat (i.e., Riversidean upland sage scrub) within the project footprint regardless of the quality of the vegetation. Actual impacts to species are likely to be much less than identified because the majority of Riversidean upland sage scrub within the BSA provides marginal habitat for the coastal California gnatcatcher.

³ Impacts to Stephens' kangaroo rat habitat identified in this table include all potentially suitable habitat (i.e., Riversidean upland sage scrub and nonnative grassland) within the project footprint regardless of the quality of the vegetation. Actual impacts to this species are likely to be much less than identified because the majority of Riversidean upland sage scrub and nonnative grassland within the BSA provide marginal habitat for Stephens' kangaroo rat. The preferred alternative also includes alkali grasslands as suitable habitat for Stephens' kangaroo rat, which is why the acreage for the preferred alternative is greater than for the other Build Alternatives.

⁴ All San Bernardino kangaroo rat critical habitat within right-of-way boundary has primary constituent elements.

Alt = Alternative

BSA = biological study area

Mod = Modified

SJN DV = San Jacinto North Design Variation

SJRB DV = San Jacinto River Bridge Design Variation

SR-79 = State Route 79

This page intentionally left blank

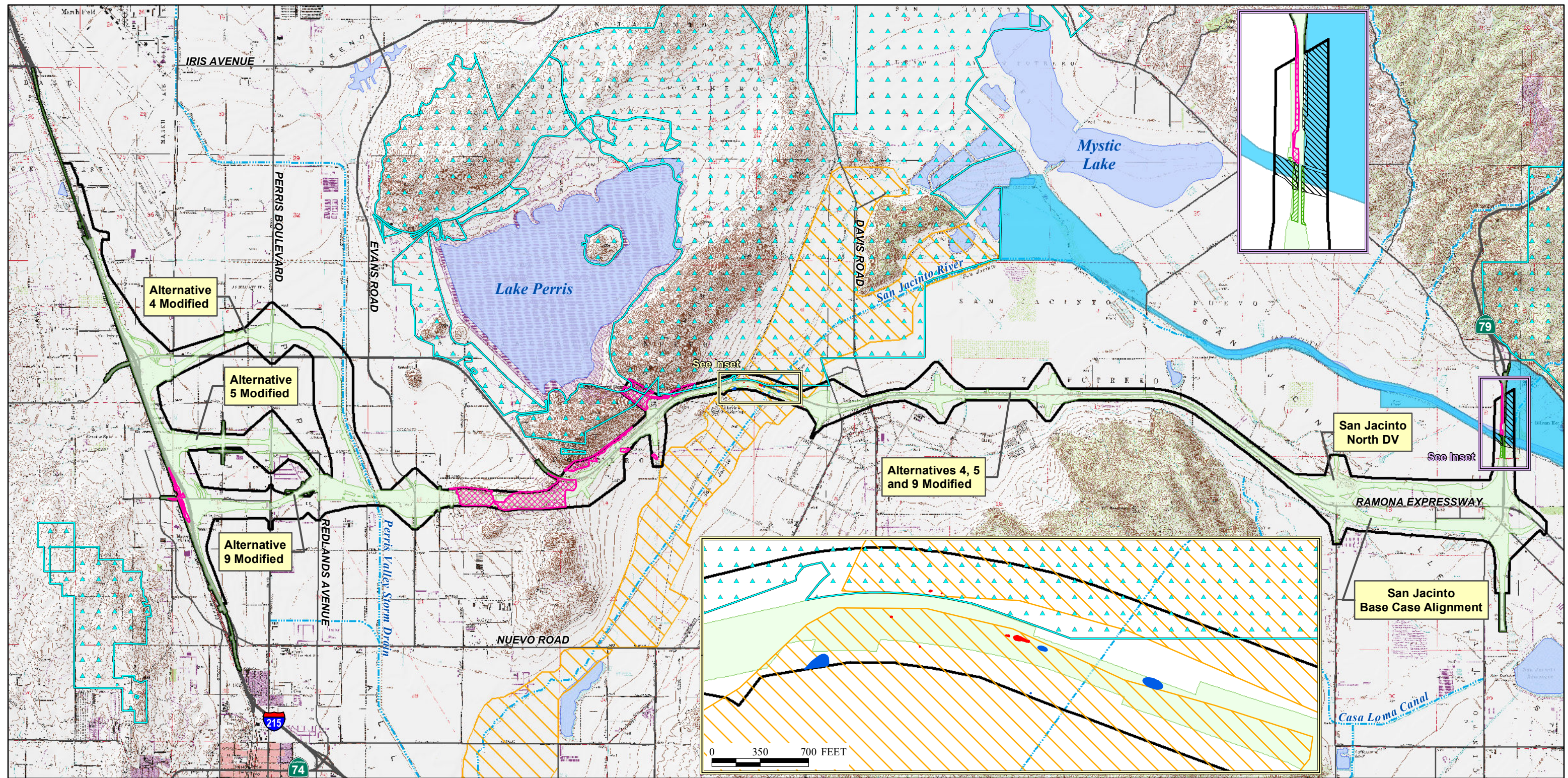


FIGURE 3.21.1

LEGEND

- Biological Study Area
- Limits of Proposed Improvements
- Major Water Courses
- 4 Alternative(s) Modified
- Spreading Navarretia Critical Habitat, Final 10/07/2010
- San Bernardino Kangaroo Rat Critical Habitat, Final Reinstated 04/23/2002
- San Jacinto Valley Crownscale Locations
- Spreading Navarretia Locations

- Least Bell's Vireo Occupied Habitat
- San Bernardino Kangaroo Rat Occupied Habitat
- Potential Habitat for California Gnatcatcher* (Riverside Upland Sage Scrub)

- Stephens' Kangaroo Rat Reserve*

*No surveys required for California Gnatcatcher or Stephens' Kangaroo Rat by the MSHCP

SOURCE: LSA (Supplement to the Natural Environment Study, 2011); Jacobs Engineering (02/2011); County of Riverside (2002, 2010 & 2011); U.S. Fish and Wildlife Service Federal Registry Critical Habitat (2002, 2010 & 2012); USGS 7.5' Topos



Critical Habitat Areas and Listed Species

08-RIV-MCP PM 0.0/16.3; 08-RIV-215 PM 28.0/34.3
EA 08-0F3200 (PN 080000125)



This page intentionally left blank

Conservation Authority Joint Project Review for the MCP project and the Mid County Parkway MSHCP Consistency Determination Including Determination of Biologically Equivalent or Superior Preservation Analysis, including the DBESP for Criteria Area Species Survey Area (CASSA) species, one of which is San Jacinto crownscale.

Critical habitat was proposed by the USFWS for San Jacinto Valley crownscale on April 16, 2012, subsequent to the approval of the Supplemental NES (December 2011). On April 16, 2013 (after circulation of the Recirculated Draft EIR/ Supplemental Draft EIS in January 2013), the USFWS did not designate any critical habitat for the San Jacinto Valley crownscale. The impacts of the Build Alternatives on San Jacinto Valley crownscale are summarized in Table 3.21.B. Section 7 consultation with the USFWS was required and completed because the MCP Build Alternatives “may affect, likely to adversely affect” San Jacinto Valley crownscale.

Spreading Navarretia.

All the MCP Build Alternatives would directly impact 1.09 acres of spreading navarretia within the MSHCP-designated survey area for this species, as shown in Table 3.21.B. This impact calculation is based on the conservative (worst-case) assumption that all plant habitat within the right-of-way footprint will be permanently impacted. All of the habitat with long-term conservation value for this species will be impacted. Because greater than 10 percent of areas within the right-of-way footprint that have long-term conservation value for this species will be impacted, a DBESP was prepared pursuant to MSHCP, Section 6.1.3. The DBESP requirements are discussed below in Section 3.21.4. Refer to Appendix T, which includes the Mid County Parkway MSHCP Consistency Determination Including Determination of Biologically Equivalent or Superior Preservation Analysis, including the DBESP for plants in the Narrow Endemic Plant Species Survey Area (NEPSSA), one of which is spreading navarretia.

The 16.5 to 18.6 acres of spreading navarretia critical habitat (Table 3.21.B) that would be affected by the project alternatives consist primarily of a dense cover of nonnative grasses and forbs. These areas of dense nonnative cover, although mostly unsuitable for spreading navarretia, contain small areas of ephemeral wetland habitats that are suitable. With their local watersheds, these small areas constitute 1.09 acres of critical habitat with primary constituent elements consisting of ephemeral wetlands

and their local watersheds in heavy soils that support ponding of sufficient duration to provide spreading navarretia habitat.

Formal Section 7 consultation with the USFWS was required and completed because the MCP Build Alternatives “may affect, likely to adversely affect” spreading navarretia.

Arroyo Toad

According to the *Recovery Plan for the Arroyo Toad* (USFWS 1999), the closest occurrence of the arroyo toad (from 1975), is likely extirpated and is located approximately 6 miles east of the eastern boundary of the BSA. The closest California Natural Diversity Database (CNDDDB) record of arroyo toad is approximately 15 miles upstream of the MCP crossing of the San Jacinto River at State Route 79 (SR-79). This occurrence, from 2000, is located in the foothills of Mount San Jacinto, within Bautista Creek, at an elevation approximately 1,200 ft higher than the BSA. Although arroyo toad is a covered species by the MSHCP, the BSA is not located within the MSHCP-designated survey area for the arroyo toad. According to Table 9-2 of the MSHCP, individual arroyo toads within areas outside the MSHCP Conservation Area will be subject to Incidental Take consistent with the Plan. No surveys were conducted for the arroyo toad because the species is outside the MSHCP-designated survey area. The project would not result in impacts to the arroyo toad based on the low likelihood that the arroyo toad would be found within the BSA. Refer to Section 3.17, Natural Communities, for further discussion of MCP compliance with the MSHCP.

Under Section 7 of FESA, formal consultation with the USFWS was not required for this species because the MCP Build Alternatives would have “no effect” to arroyo toad.

Swainson's Hawk

All the MCP Build Alternatives may result in a minimal loss of potential foraging habitat for the Swainson's hawk. However, under the CESA, there will be no take of the Swainson's hawk nesting habitat because there is no suitable nesting habitat for this species within the BSA. Impacts to foraging habitat of this species would be minimal because undeveloped areas adjacent to the MCP Build Alternatives would still provide adequate foraging habitat.

Swainson's hawk is a covered species by the MSHCP. Refer to Section 3.17, Natural Communities, for further discussion regarding MCP compliance with the MSHCP.

Bald Eagle

The MCP project will not result in take of bald eagles or bald eagle nesting habitat because there is no suitable nesting habitat for this species within the BSA. The bald eagle may winter at Lake Perris because this species preys primarily on fish and waterfowl. The MCP Build Alternatives will not result in any impacts to foraging habitat at Lake Perris because suitable foraging habitat at Lake Perris for the eagle would not be disturbed by the project.

The bald eagle is a covered species by the MSHCP; however, no take of bald eagle is allowed, per Section 15.5 of the MSHCP Implementing Agreement. Refer to Section 3.17, Natural Communities, for further discussion regarding MCP compliance with the MSHCP. As noted above, the MCP Build Alternatives will not result in the “take” of any bald eagles.

Coastal California Gnatcatcher

No coastal California gnatcatchers were observed within the BSA during fieldwork. However, the MCP project may result in the loss of potential habitat for the coastal California gnatcatcher and habitat fragmentation.

The seasonal restrictions for clearing vegetation outside the nesting season will eliminate impacts to individual coastal California gnatcatchers. However, as noted above, the project will result in the loss of potential coastal California gnatcatcher foraging and nesting habitat. As shown in Table 3.21.B, there will be between 88.1 and 93.6 acres of impacts to Riversidean sage scrub habitat, depending on the alternative and design variation, (86.4 acres for the preferred alternative (Alternative 9 Modified with the SJRB DV) part of which may be suitable for or occupied by the coastal California gnatcatchers.

The coastal California gnatcatcher is a covered species by the MSHCP. Refer to Section 3.17, Natural Communities, for further discussion regarding MCP compliance with the MSHCP.

Under Section 7 of FESA, formal consultation with the USFWS was required and completed because the project “may affect, likely to adversely affect” California gnatcatcher.

Least Bell’s Vireo

One pair of least Bell’s vireo was observed within the BSA at one location along the San Jacinto River, west of Sanderson Avenue, in spring 2008. Impacts to least Bell’s

vireo habitat would be 3.66 acres for the base case designs and the San Jacinto River Bridge Design Variations (SJRBDVs) for all the MCP Build Alternatives, as shown in Table 3.21.B. Impacts would be slightly less (3.59 ac) for the San Jacinto North Design Variations (SJNDVs) for all the MCP Build Alternatives. Based on typical territory sizes in California, it is estimated that one to two least Bell's vireo pairs could occupy the riparian habitat where the least Bell's vireo was observed in 2008.

Project impacts to the least Bell's vireo will occur through the loss of nesting and foraging habitat within the project footprint. Project impacts in the form of direct mortality (e.g., destruction of nests and mortality of young) will be avoided by conducting vegetation clearing outside February 15 to September 15.

Future development and use of MCP may result in additional litter. Litter may also result in animal infestations, which may result in additional predators in the area that may prey on the least Bell's vireo.

The least Bell's vireo is a covered species by the MSHCP. Under CESA, "take" for least Bell's vireo is covered through consistency with the MSHCP. Refer to Appendix T, which includes the Mid County Parkway MSHCP Consistency Determination Including Determination of Biologically Equivalent or Superior Preservation Analysis, including measures in the DBESP that provide protection for riparian birds, including the least Bell's vireo.

Formal Section 7 consultation with the USFWS was required and completed because this project "may affect, likely to adversely affect" the least Bell's vireo.

Southwestern Willow Flycatcher

All the MCP Build Alternatives may result in the loss of potential foraging habitat used by this species during migration. However, it should be noted that this subspecies is essentially unknown as a migrant in California, with the vast majority of migrant willow flycatchers assumed to belong to the northwestern subspecies *E.t. brewsteri* (the two are indistinguishable under normal field conditions). Also, virtually any wooded habitat can serve as habitat for this species during migration, so the riparian forest and riparian scrub within the BSA is not special in this regard. No nesting pairs of southwestern willow flycatcher were observed within the BSA and there appears to be no suitable nesting habitat available, as surface water is typically not present in summer in association with riparian woodland or scrub. There were no proven observations of southwestern willow flycatcher, so no direct impacts to this subspecies are anticipated.

The southwestern willow flycatcher is a covered species by the MSHCP. Refer to Appendix T, which includes the Mid County Parkway MSHCP Consistency Determination Including Determination of Biologically Equivalent or Superior Preservation Analysis, including measures in the DBESP that provide protection for riparian birds, including the southwestern willow flycatcher.

Under Section 7 of FESA, formal consultation with the USFWS was not required for this species because the MCP Build Alternatives would have “no effect” to southwestern willow flycatcher.

San Bernardino Kangaroo Rat

The MCP Build Alternatives will directly impact 4.25 acres of San Bernardino kangaroo-rat-occupied habitat for both the base case alternatives and the SJRB DVs, and 4.32 acres for the SJN DVs, as shown in Table 3.21.B. The preferred alternative (Alternative 9 Modified with SJRB DV) would impact only 1.29 acres of San Bernardino kangaroo rat occupied habitat, less than the other Build Alternatives, as shown on Table 3.21.B.

The 2.9 acres (or 1.29 acres for the preferred alternative) of San Bernardino kangaroo rat critical habitat (see Table 3.21.B) that would be affected by the project consist primarily of riparian woodland and riparian scrub with loamy and sandy soils. Although alluvial scrub, the natural community typically inhabited by San Bernardino kangaroo rat, is not present in the BSA, the affected area is important to the species because it consists of marginal habitats in proximity to occupied habitat.

The San Bernardino kangaroo rat is a covered species by the MSHCP. Refer to Appendix T, which includes the Mid County Parkway MSHCP Consistency Determination Including Determination of Biologically Equivalent or Superior Preservation Analysis, including measures in the DBESP that provide protection for the San Bernardino kangaroo rat.

Formal Section 7 consultation with the USFWS was required and completed because the MCP Build Alternatives “may affect, likely to adversely affect” the San Bernardino kangaroo rat.

Stephens' Kangaroo Rat

The Stephens' kangaroo rat is known to occur throughout the Reserve lands of the Habitat Conservation Plan for the Stephens' Kangaroo Rat. It may also occur in nonreserve lands in coastal sage scrub and nonnative grassland communities. As

shown in Table 3.21.B, there will be between 138.4 acres and 145.6 acres of impacts to Riversidean sage scrub and nonnative grassland habitat, depending on the alternative and design variation, part of which may be suitable for or occupied by Stephens' kangaroo rat. Potential project impacts to this species could include loss of potential habitat and habitat fragmentation, particularly along the San Jacinto-Lake Perris Reserve (a Core Reserve of the Habitat Conservation Plan for the Stephens' Kangaroo Rat). Although the reserve is outside the project footprint, an approximately 1.5-mile-long segment of all MCP Build Alternatives and design variations is adjacent to the southern boundary of this reserve. As required under the Western Riverside County MSHCP, trapping was conducted in suitable habitat adjacent to the San Jacinto-Lake Perris Reserve for the San Bernardino kangaroo rat and Los Angeles pocket mouse. No Stephens' kangaroo rats were captured during this trapping effort.

The Stephens' kangaroo rat is a covered species by the MSHCP and a covered species under the Habitat Conservation Plan for the Stephens' Kangaroo Rat. Under CESA, "take" for Stephens' kangaroo rat is covered through consistency with the MSHCP. Under FESA, "take" authorization was required and completed because the MCP project "may affect, likely to adversely affect" the Stephens' kangaroo rat. While neither RCTC nor FHWA are permittees under the SKR HCP, incidental take coverage provided to the Riverside County Habitat Conservation Agency (RCHCA) by the SKR HCP can be extended to FHWA where the proposed action is consistent with the SKR HCP and its associated implementation agreement and permit. Public works projects, such as roads, are exempt from fee payment. Additionally, construction of transportation improvement projects is identified as a covered activity in the SKR HCP biological opinion (1-6-96-FW-27). As discussed later in Section 3.21.4, the MCP project has secured "take" authorization directly from the USFWS through Section 7 consultation.

Indirect Effects (All Threatened and Endangered Species)

Substantial indirect effects on arroyo toad, bald eagle, Swainson's hawk foraging habitat, and southwestern willow flycatcher are not anticipated. Indirect impacts on the remaining threatened and endangered species and critical habitats discussed above are included in the permanent impact calculations and may result from edge effects such as increased potential for fire, exotic plant infestations, unauthorized recreational use, and pollutants associated with vehicle use of the freeway. Increased fire frequency may result in an increase of exotic plant species and type conversion from native habitats to dense, nonnative grasslands, potentially reducing the quality and

area of sensitive species habitat. Fire risk also increases the potential that vegetation clearing and removal of habitat adjacent to roads will be required. Additionally, pollutants (in the form of nitrogen compounds from car emissions) may settle on the soil and stimulate growth of nonnative vegetation, further increasing fire risk and habitat degradation. The MCP project may provide additional access points for unauthorized off-road vehicle use, which may degrade habitat of these species and may also promote exotic plant infestation.

In addition to the indirect effects discussed above, the following indirect effects may occur:

Indirect effects on San Jacinto Valley crownscale and spreading navarretia could result from localized increases in water velocity following major floods due to changes in river hydraulics caused by placement of bridge columns, abutments, and fill. The 4,321 ft long San Jacinto River Bridge would be on columns across the floodplain. The San Jacinto River Bridge Design Variation would consist of a 1,941 ft long bridge on columns, with 1,849 linear feet of fill on either side. Neither design option would result in a longitudinal encroachment in the floodplain. Although the fill for the design variation would be within the mapped 100-year floodplain, it would not substantially modify the hydrology or hydraulics of the River. This is because the existing Ramona Expressway bridge currently constrains the 10- and 25-year flows of the San Jacinto River, and during 100-year events, the River flows over the top of the existing bridge. The existing Ramona Expressway Bridge will remain in place, still providing control to the movement of water. Because of the control provided by the existing bridge, the 1,849 ft of fill associated with the SJRB DV would result in negligible changes to the water surface elevation associated with the 100-year event. Moreover, there would be no changes to the floodplain limits downstream and very limited changes upstream, such that the total floodplain area would not be substantially modified. The existing bridge would also remain in place and control water movement for the longer bridge option. As a result, neither bridge design would result in substantial changes to the existing conditions relative to floodplain area and flow characteristics, including the velocity of flow. Because of the negligible changes in velocity and floodplain area anticipated, substantial indirect effects on the plant species would not be expected. Refer to Section 3.9.3.1, Permanent Impacts, for additional discussion of bridge impacts.

Indirect effects on California gnatcatcher, least Bell's vireo, San Bernardino kangaroo rat, and Stephens' kangaroo rat may result from an increase in light, glare, and noise

associated with vehicles, and daytime and nighttime construction activities. Artificial lighting associated with the MCP project may affect kangaroo rat behavior and enable predators such as owls to hunt more efficiently, thus increasing predation on kangaroo rats. To minimize this effect, lighting will be located and directed within the construction area to minimize light shining off site. Also, future development and use of the MCP project may result in additional litter. Litter may result in animal infestations, which may attract additional predators into the area, increasing predation on sensitive species. Listed animal species that may be affected by light and noise would already be accustomed to a certain level of light and noise along Ramona Expressway.

Noise associated with project construction could result in temporary displacement of individuals. Noise effects would be minimized because no pile driving activities will occur at bridge structures adjacent to areas that may be occupied by listed species.

No Build Alternatives

Under Alternative 1A, the MCP project would not be constructed. Planned improvements in the regional and local circulation system, as accounted for in the adopted Riverside County General Plan, RCTC's Measure A program, and city General Plans would be implemented assuming 2040 land use conditions.

Under Alternative 1B, the planned street network would be developed according to the Circulation Element of the Riverside County General Plan, including improvements to Ramona Expressway.

Impacts related to a footprint were not calculated for the No Build Alternatives; therefore, a qualitative analysis of the permanent effects of Alternatives 1A and 1B is presented here. Alternative 1A would generally result in fewer impacts to threatened and endangered species than the MCP Build Alternatives because the MCP project would not be built and no improvements would be made to the Ramona Expressway. Alternative 1B would generally result in fewer impacts than the Build Alternatives because the Ramona Expressway would be widened and the MCP project would not be built.

3.21.3.2 Temporary Impacts

Temporary impacts to threatened or endangered species may occur during construction where habitats, populations, or individuals are temporarily disturbed by construction noise, dust, or during grading or other construction activities. The extent of these temporary impacts to habitat for listed species is calculated entirely as

permanent impacts. Temporary construction effects to animal species are expected as a result of human encroachment, construction vibration, dust, noise, and light.

For this impact analysis, a conservative (worst-case) right-of-way footprint was established for each alternative that includes areas of cut-and-fill, staging areas for construction vehicles, equipment and materials, haul routes, and water quality treatment features. While some parts of this right-of-way footprint will only be temporarily disturbed during construction and would be revegetated with native plant species, it is not expected that this revegetation would fully restore the functions and values of the impacted wildlife habitat. Therefore, the analysis of impacts conservatively estimates a worst-case impact scenario under which all areas within the right-of-way footprint are calculated as permanent impacts, with the exception of areas spanned by bridges. Although impacts to riparian habitats and jurisdictional areas at the bridged areas have been identified as temporary or permanent impacts, impacts to threatened or endangered species in these areas have all been calculated as permanent impacts within the MCP project footprint.

Although temporary nighttime construction activities may occur in high traffic areas, since these areas do not occur at environmentally sensitive areas with long-term conservation value for special-status species, nighttime construction lighting and noise are anticipated to have only minor disruption to species covered under the MSHCP.

3.21.4 Avoidance, Minimization, and/or Mitigation Measures

Mitigation for impacts to spreading navarretia, San Jacinto Valley crowscale, California gnatcatcher, least Bell's vireo, San Bernardino kangaroo rat, and Stephens' kangaroo rat will be achieved through implementation of the measures specified in the Mid County Parkway MSHCP Consistency Determination Including Determination of Biologically Equivalent or Superior Preservation Analysis. The MSHCP was conceived, developed, and is being implemented specifically to address the direct, indirect, cumulative, and growth-related effects on species and habitats in western Riverside County resulting from build out of covered land use and infrastructure projects, including the MCP project.

Impacts to these species from the MCP Build Alternatives will be offset by implementing the agreements established in the MSHCP, which include the formation of the MSHCP Conservation Area, the Guidelines for the Siting and Design of Planned Roads Within the Criteria Area and Public/Quasi-Public Lands (MSHCP,

Section 7.5.1), MSHCP Construction Guidelines for covered projects (MSHCP, Section 7.5.3), MSHCP Standard Best Management Practices (MSHCP, Appendix C), and reducing edge effects to preserved habitat (by following the Guidelines pertaining to the Urban/Wildlands Interface in MSHCP, Section 6.1.4). Details of how the MCP project will comply with the MSHCP are provided in Appendix T, Western Riverside County Multiple Species Habitat Conservation Plan Consistency Determination Including Determination of Biologically Equivalent or Superior Preservation Analysis and the DBESP Addendum.

In addition to the measures provided in Sections 3.17 and 3.19, the following measures will be implemented to avoid and minimize impacts to threatened and endangered species during construction of the MCP project.

In addition to the measures listed below, the FHWA has conducted a Section 7 Consultation with the USFWS for impacts to spreading navarretia, least Bell's vireo, coastal California gnatcatcher, San Bernardino kangaroo rat, Stephens' kangaroo rat, and effects to designated critical habitat for spreading navarretia and San Bernardino kangaroo rat and proposed critical habitat for San Jacinto Valley crowscale. The Section 7 consultation was based upon the MSHCP consistency documentation and DBESPs provided in Appendix T. The USFWS issued the Biological Opinion for the MCP project on February 11, 2015. The conditions stipulated in the Biological Opinion (Appendix W of this EIR/EIS) are included in the measures in the Environmental Commitments Record for the MCP project (see Appendix F, Environmental Commitments Record).

The Recirculated Draft EIR/Supplemental Draft EIS included Measure TE-1, which required the preparation of DBESPs for spreading navarretia, San Jacinto Valley crowscale, least Bell's vireo, and San Bernardino kangaroo rat pursuant to Sections 6.1.2 and 6.1.3 of the Western Riverside County MSHCP. That measure was satisfied based on completion of the Western Riverside County Multiple Species Habitat Conservation Plan Consistency Determination and the Regional Conservation Authority Joint Project Review for the MCP project (both provided in Appendix T of this Final EIR/EIS). As a result, that part of Measure TE-1 is no longer required for the MCP project.

Measure TE-1 in the Recirculated Draft EIR/Supplemental Draft EIS also included a requirement regarding conservation of off-site mitigation areas in perpetuity; that part of Measure TE-1 is still applicable as noted below.

The Recirculated Draft EIR/Supplemental Draft EIS included Measure TE-2, which proposed that “Prior to construction, the RCTC Project Manager will ensure “take” is authorized for areas of disturbance to occupied habitat of the Stephens’ kangaroo rat. RCTC will voluntarily pay mitigation fees (\$500/acre) to mitigate for disturbance of occupied Stephens’ kangaroo rat habitat.” This measure was proposed prior to the completion of the MSHCP consistency report and DBESP analysis. Based on the measures described in the DBESPs included in the MSHCP Consistency Determination Including Determination of Biologically Equivalent or Superior Preservation Analysis MSHCP provided in Appendix T, RCTC has revised measure TE-2 to provide mitigation for Stephens’ kangaroo rat as part of the mitigation acreage to be acquired to offset impacts to riparian-alkaline communities in the San Jacinto River floodplain.

TE-1 **Conservation of Off-Site Mitigation Areas.** After completion of the implementation of the Determination of Biological Equivalent or Superior Preservation (DBESP) measures for spreading navarretia, San Jacinto Valley crowscale, least Bell’s vireo, and San Bernardino kangaroo rat, the RCTC Project Manager will work with the Riverside County Transportation Commission (RCTC) Right-of-Way Agents to ensure that all off-site mitigation areas will be conserved in perpetuity, either through fee title transfer or a conservation easement to the Western Riverside County Regional Conservation Authority (RCA).

TE-2 **Stephens’ Kangaroo Rat.** Prior to the start of construction, the RCTC Project Manager will ensure “take” is authorized for areas of disturbance to occupied habitat of the Stephens’ kangaroo rat through implementation of the measures described in the DBESP for riparian-alkaline communities in the San Jacinto River floodplain included in the MSHCP Consistency Determination Including Determination of Biologically Equivalent or Superior Preservation Analysis provided in Appendix T.

This page intentionally left blank